charnwood

Woodworking machinery at its best!

12” BANDSAW
OPERATING INSTRUCTIONS
MODEL: W721

CE

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GENERAL SAFETY RULES

WARNING: Do not attempt to operate the machine until you have thoroughly read and understood completely all instructions, rules, etc. contained in this manual. Failure to comply may result in accidents involving fire, electric shock, or serious personal injury. Keep this owner's manual and review frequently for continuous safe operation.

1. Know your machine. For your own safety, read the owner's manual carefully. Learn its application and limitations, as well as specific potential hazards pertinent to this machine.

2. Make sure all tools are properly earthed.

3. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, make sure it is properly replaced before using the machine again.

4. Remove adjusting keys and spanners. Form a habit of checking to see that the keys and adjusting spanners are removed from the machine before switched it on.

5. Keep your work area clean. Cluttered areas and workbenches increase the chance of an accident.'

6. Do not use in dangerous environments. Do not use power tools in damp or wet locations, or expose them to rain. Keep work areas well illuminated.

7. Keep children away. All visitors should be kept a safe distance
8. from the work area.

9. Make workshop childproof. Use padlocks, master switches and remove starter keys.

10. Do not force the machine. It will do the job better and be safer at the rate for which it is designed.

11. Use the right tools. Do not force the machine or attachments to do a job for which they are not designed. Contact the manufacturer or distributor if there is any question about the machine's suitability for a particular task.

12. Wear proper apparel. Avoid loose clothing, gloves, ties, rings, bracelets, and jewellery which could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

13. Always use safety glasses. Normal spectacles only have impact resistant lenses. They are not safety glasses.

14. Do not over-reach. Keep proper footing and balance at all times.

15. Maintain the machine in good condition. Keep the machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.

16. Disconnect the machine from power source before servicing and when changing the blade.

17. Never leave the machine running unattended. Turn the power off. Do not leave the machine until it comes to a complete stop.

18. Do not use any power tools while under the effects of drugs, alcohol or medication.

19. Always wear a face or dust mask if operation creates a lot of dust and/or chips. Always operate the tool in a well ventilated area and provide for proper dust removal. Use a suitable dust extractor.

ADDITIONAL RULES FOR BAND SAWS

1. Ensure that the saw table is clear of off-cuts, tools or anything else that might foul the work-piece.

2. When cutting long boards use one or more roller stand(s) to support the work or have a competent helper to support it as it feeds off the rear of the table.

3. Always make sure that the blade is tracked and tensioned correctly before starting to use the saw.

4. Always use a brush to clear the table of dust or debris. **NEVER** use your hands, especially when the machine is running.

5. Always ensure that the thrust bearings and guide blocks are correctly adjusted before using the saw.

6. ALWAYS USE A PUSH STICK WHEN IT IS NECESSARY TO PUSH ANY PIECE OF MATERIAL OF SUCH SIZE THAT IT WOULD BRING YOUR HANDS WITHIN 30 CM OF THE BLADE.

7. Do not cut material that is badly warped or which has screws or nails in it.

8. Be extra vigilant when cutting stock which has loose knots in it as these my fly out of the saw.

9. NEVER tilt the table when the saw is running.

10. To avoid exposure to hazardous dust, do not use this saw without connecting it to a suitable dust extractor.

11. Always work with a sharp saw blade and feed the work at a rate suited to the thickness and hardness of the material.

Note: This band saw has been designed and built solely as a woodworking machine. Do not modify it in any way or use it for anything other than its designated purpose. Neither the manufactures nor the supplier are liable for any damage or injury caused by incorrect assembly, operation or electrical connection of this machine.

Specification

Table size	550 x 400 mm
Table height	1090 mm
Motor	750W
Blade length	2240 mm
Blade widths	6 to 19 mm
Blade speeds (no load)	360 and 720 m/min
Blade widths	6 to 12 mm
Maximum depth of cut at 90°	160 mm
Maximum depth of stock at 45°	89.4 mm
Throat capacity	305 mm
Dust extractor hose connection	100 mm
Weight	73kg nett
Dimensions (W x D x H)	800 x 630 x 1720 mm

Features

Precision ground, cast iron table with adjustable scale on rip fence carrier

0 to 45° table tilt

High Quality, British made blade

High blade speed for cutting most wood

Low blade speed for cutting very hard woods, plastic and metal (with a suitable blade)

Easily portable machine

Quick release, positive lock rip fence

Cross cut/mitre fence with easily read scale

Tool free blade tracking and tensioning

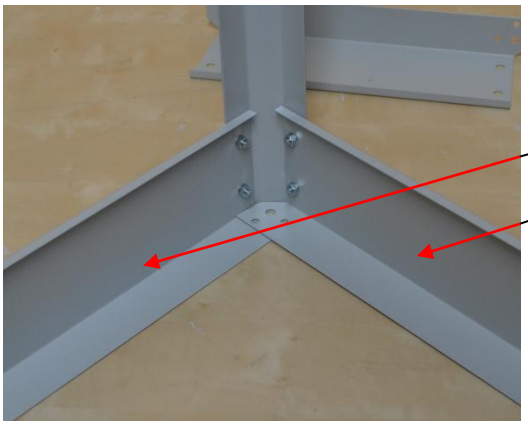
Unpacking

Cut the strapping, open the carton and remove all parts from the packaging

Assembly

Building the stand

This is most easily accomplished on a bench or table

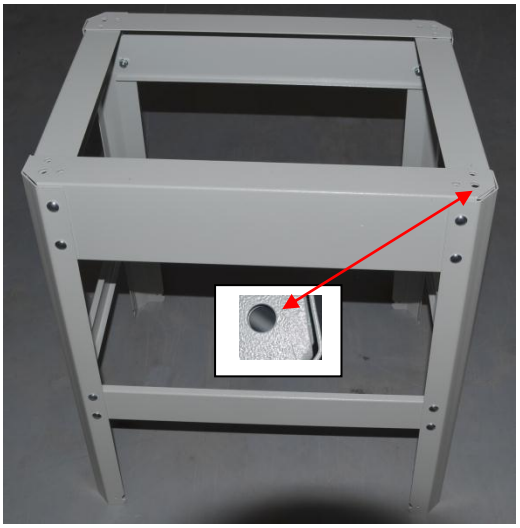


Leave all nuts and bolts finger tight until you have finished assembling this stand. Start with the long top rail and bolt it inside one leg.

Add a short rail, making sure that it sits above the long rail as viewed from the underside, i.e. as you have it on the bench.

Continue until all four legs and rails are joined.

Add the lower rails and feet.



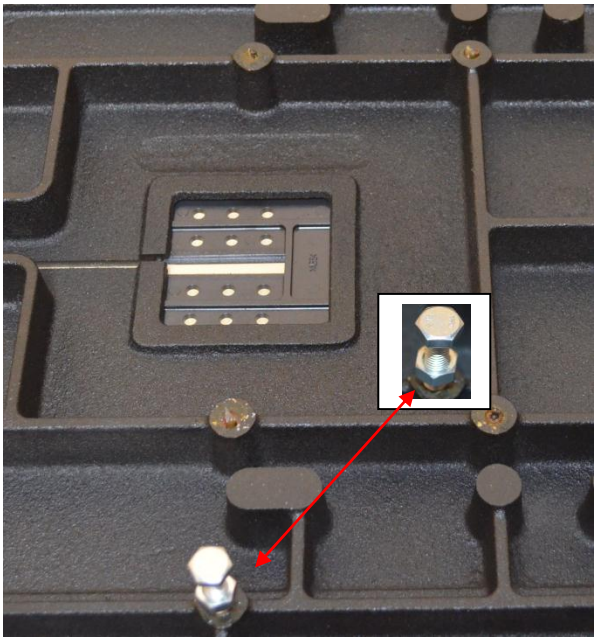
Carefully align the parts until the stand is square and ensure that the 4 large holes in the top corners are lined up as you will need to put bolts through these to fix the saw to the base.

Fitting the Saw to the Stand

If you have someone to help you, the easiest way to join the saw and the stand is to lift the saw and lower it into place. Secure it with the four countersunk setscrews, washers and nuts provided.

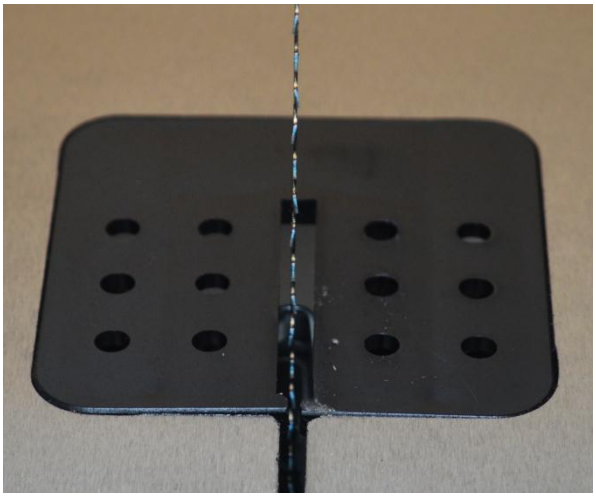
Fixing bolts

Alternately;
If you have nobody to help, lower the saw onto its back and bolt the stand to it. After tightening the fixing bolts, lift the top of the saw and pivot it on the rear feet until it is upright and all four feet are on the ground.

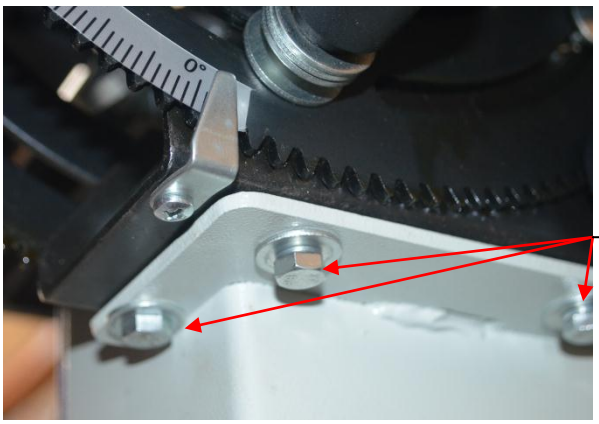


Screw the longest of the 6 mm hex headed bolts into its hole as shown.

Place the table in position on the trunnion and fix it with the four remaining 6 mm bolts.

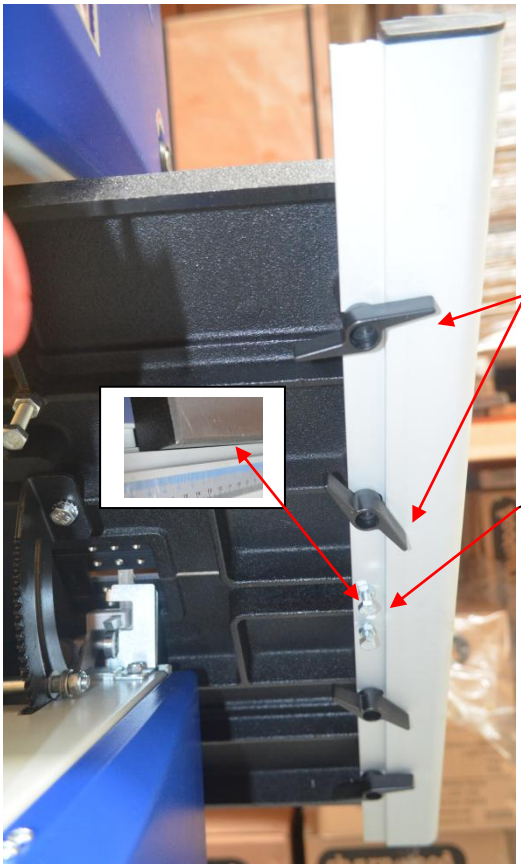


Check to see if the blade is centred in the slot. You will probably find that it is offset to one side or the other.



This pointer is adjustable if the setscrew is loosened. You may need to make a small adjustment after the table is set perpendicular to the blade.

If the table needs to be moved laterally to centre the slot on the blade, loosen these three screws, move the table to the correct position and retighten the bolts.



Screw the four hex, wing bolts and washers into the tapped holes on the underside of the table and slide the rip fence carrier on to them.

Adjust the two hex headed bolts so that the carrier fits snugly to the table with no gap between its upper edge and the table.

If you do not keep the carrier tight to the table the rip fence will not be perpendicular to it.

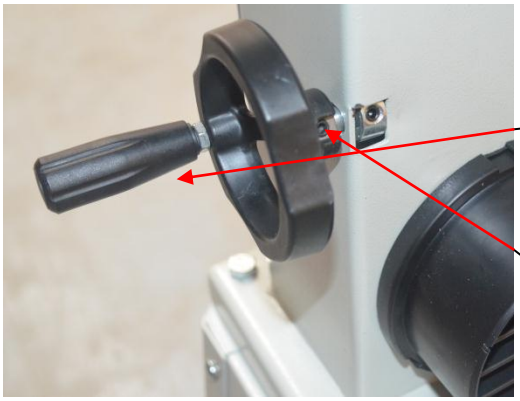
Screw in and lock the push stick hanger.

Hang the push stick on it and remember that this is one of the world's best finger preservers!

Locate the tension adjustment knob and using a suitable tool, remove the cap.
Be careful not to lose the nut which is inside.

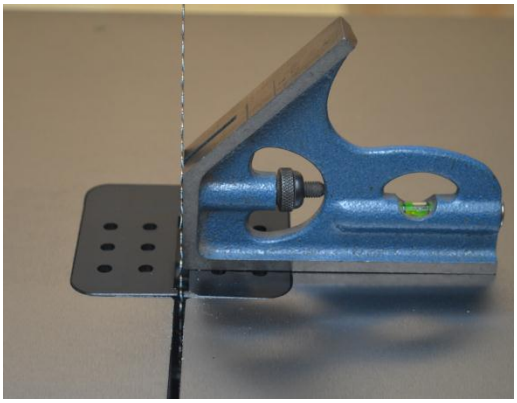
Place it over the spindle sticking out of the top of the saw, screw on the nut and lock the knob between the two nuts.

Replace the cap.



Fit the control handle to the spindle protruding from the side of the saw. Rotate the handle, so that the grubscrew tightens onto the flat side on the spindle.

Tighten the grubscrew securely.



Apply a little tension to the blade and use a set square to position the table at right angles to it.

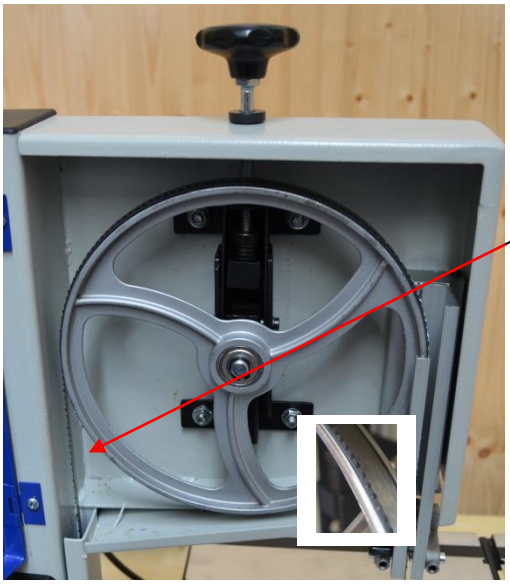
Lock it in position and if necessary, adjust the level stop screw and the pointer so that it aligns with the zero as shown earlier.

Setting up your saw

Quick blade tensioner (shown in tight position). Looking from the front of saw, turn the lever anticlockwise to slacken the tension.

Blade guard positioner and lock

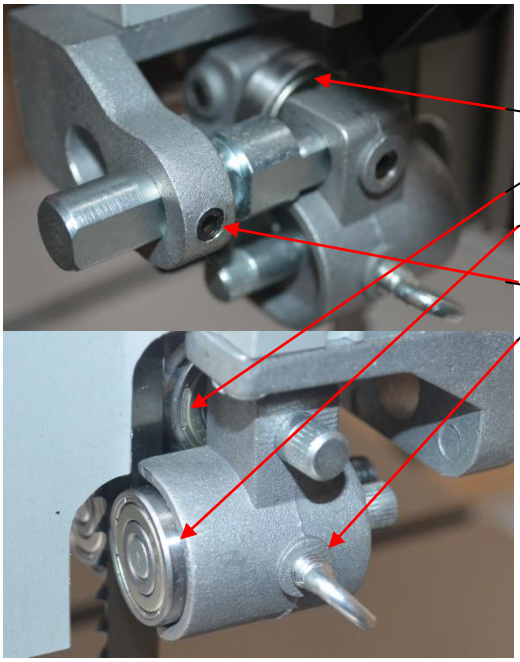
Tracking control and lock



After ensuring that the quick tension lever is set in the tensioned position, adjust the blade tension with the hand wheel on top of the upper housing.

'Pluck' the back of the blade, as you would the string of a double bass, at this point. As the blade tension is increased, the pitch of the sound will rise. Stop increasing the tension as soon as the sound starts to become dull. Alternatively, raise the blade guard to its highest position and adjust tension until the blade, at the midpoint between table and guard can be deflected only 3 to 5 mm with finger pressure.

Turn the upper wheel clockwise, by hand and adjust the tracking control until the blade is centred on the wheel, as shown in the inset illustration. Lock the adjuster in this position.



The upper and lower thrust and guide bearings should be set up next.

Thrust bearing

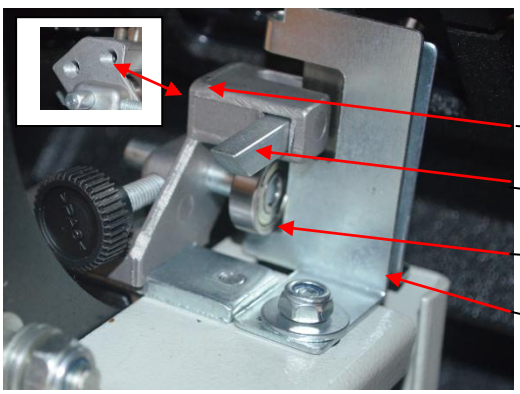
Guide bearing

Guide bearing locking screws

Thrust bearing locking screw

The thrust bearing should be about 0.5 mm behind the back of the blade. Adjust it and lock it place.

Slacken the guide bearing locking screws, move the bearings in until they touch the blade. Rotate the top wheel by hand a few turns and lock the be\rings in place.



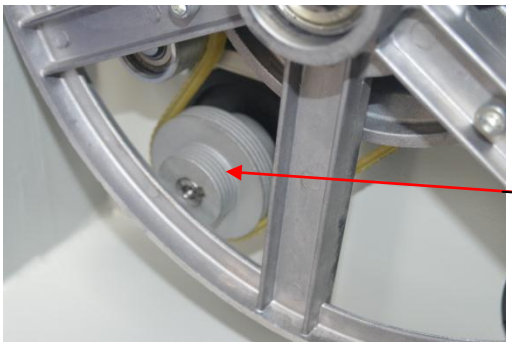
The lower thrust bearing and guide pins are adjusted similarly.

Guide pin locking screw (on rear face)

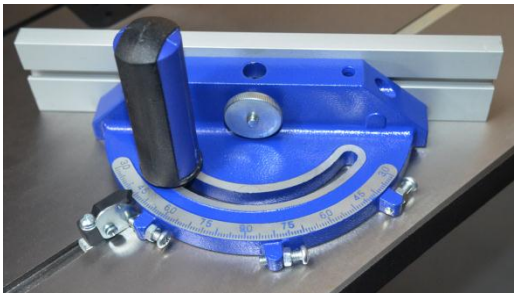
Guide pin

Lower thrust bearing

Blade guard



Release the belt tension by turning the tension control handle on the front of the lower housing. Move the belt from the larger pulley to the smaller one and then from the smaller to the larger on the other pair. Always have the drive belt on one large and one small pulley.



This bandsaw is equipped with a cross cut/mitre fence which can be fitted as shown.

The fence is equipped with adjustable stops for 45° and 90° cuts.

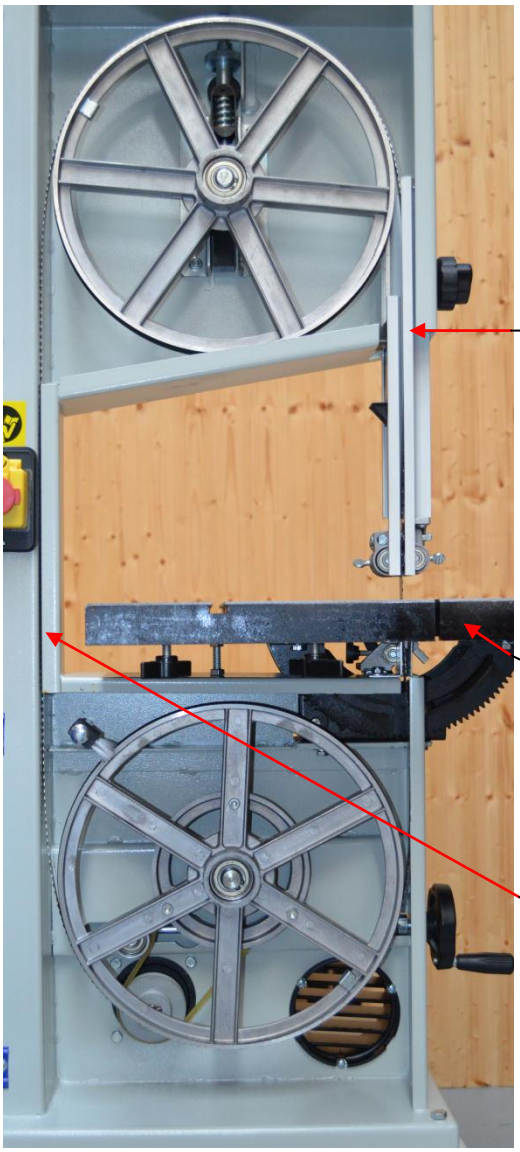
The rip fence is reversible and may be used on either side of the blade.

Your bandsaw is now ready for use but it is recommended that a suitable dust extractor is connected before use.

Changing the Blade

Bandsaw blades are sharp enough to cause injury even when too blunt to cut wood! It is recommended that protective gloves be worn when handling blades.

Unplug the bandsaw from the mains socket, slacken off the blade tension and open the upper and lower housing doors. Although there are two micro-switches which will prevent the saw from being started with a door open, disconnection is a good habit to develop.


Lower the blade guard
Remove the rip fence carrier
Slide the blade off upper and lower wheels, bringing it out of the machine via the slots in the rear frame and the blade guard.

Reverse these steps to fit the new blade. Ensure that the teeth are at the front and pointing down.

Position the blade between the guide bearings and pins. Tension and adjust the tracking as done during the initial set up. Check and adjust, if necessary, the position of the bearings and the guide pins.

W721 Parts List

No	Name	Qty
001	Lower door	1
003	Spacer bush	2
005	n/a	
007	Spring plate	2
009	Pilot pin	2
011	Circlip	2
013	Upper bearing bolt support	1
015	Hex. flanged nut	4
017	Shaft	1
019	Spring	1
021	Slider	1
023	Cover board	1
025	Guide carrier extrusion	1
027	n/a	
029	Pinion shaft	1
031	Self tapping screw	2
033	Knurled screw	4
035	Cap head screw	1
037	Knurled nut	2
039	Pilot shaft	2
041	Bearing	4
043	Brush	1
045	Flanged nut	1
047	Idler wheel	1
049	Sliding shaft	1
051	Cam	1
053	End cap	1
055	Thin hex nut	1
057	Blade tensioner bracket	1
059	Quick release shaft bearing	1
061	Thin nut	1
063	Thin nut	1
065	Setting knob	1
067	Hex head bolt	8
069	Wing nut	5
071	Washer	4
073	Locking knob	1
075	Adjusting knob	1
077	Lower bearing bolt	1
079	Knurled thumbscrew	1
081	Motor pulley	1
083	Nut	1
085	Shaft	1
087	Locking handle	1
089	Upper trunion	1
091	Pointer	1
093	Screw	1
095	Table	1

No	Name	Qty
002	Cap head bolt	4
004	Lock nut	4
006	Pilot guide	3
008	Rivet	4
010	Upper door	1
012	Upper bearing bolt	1
014	Nut	1
016	Guide plate	2
018	Split washer	2
020	Tension bracket frame	1
022	Self tapping screw	2
024	Rack	1
026	Plastic guide	2
028	Pinion	1
030	Bottom cap	1
032	Cap head screw	2
034	Bearing housing	1
036	Guide bearing	1
038	Thrust bearing	1
040	Upper wheel	1
042	Coach bolt	1
044	spacer	1
046	Circlip	1
048	Bearing	2
050	NVR switch	1
052	Tapped flange	1
054	Setting knob	1
056	Threaded rod	1
058	Nut	1
060	Quick release shaft	1
062	Locking handle	1
064	Cap	1
066	Hex head bolt	1
068	Washer	13
070	Hex head bolt	4
072	Turn lock fastener	2
074	Washer	1
076	n/a	
078	Dust extraction outlet	1
080	Guide pin housing	1
082	Motor	1
084	Hand wheel	1
086	Gearwheel	2
088	Spacer	1
090	Lower trunnion	1
092	Spacer	2
094	Coach bolt	2
096	Table insert	1

097	Wing nut	2
099	Fence bracket	1
101	Fence	1
103	Fence carrier	1
105	Self tapping screw	2
107	Handle	1
109	Shaft	1
111	Cap head bolt	2
113	Rip fence carrier	1
115	Cover plate, left	1
117	Hand wheel	1
119	Belt tensioner shaft	1
121	Microswitch cover	2
123	Microswitch box	2
125	Lock washer	4
127	Blade guard	1
129	Belt	1
131	Cap head bolt	3
133	Spacer	1
135	Spring washer	3
137	Spring washer	1
139	Frame	1
141	Parallel pin	1
143	Spring	1
145	Push stick	1

098	End cap	2
100	Coach bolt	2
102	Pressure plate	1
104	Plastic pressure plate	1
106	Cam	1
108	Cap	1
110	Pointer	1
112	Cover plate, right	1
114	Wing bolt	4
116	Handle	1
118	Setting collar	1
120	Screw	4
122	Microswitch	2
124	Nut	4
126	Self tapping screw	4
128	Tyre	2
130	Blade	1
132	Lower wheel	1
134	Pulley	1
136	Hex nut	1
138	Fixing plate	1
140	Scale	1
143	Table angle scale	1
144	Spacer	1
145	Hook	1